Claim Amendments

Please amend claims 1, 7, 9, 20, 22, 25 and 28 as follows:

Please cancel claims 5, 8, and 29 as follows:

Please add new claims 31-33 as follows:

Listing of Claims

1. (currently amended) A method of controlling the spatial distribution of RF power used to generate a plasma for processing a semiconductor device process wafer to achieve a uniform density of said plasma over an entire face of said process wafer, comprising the steps of:

(a) producing RF power;

(b) delivering the RF power to each of a plurality of separate electrode zones according to a matching network, said RF power individually deliverable to separate electrode zones at a selected RF power level, said separate electrode zones comprising an electrostatic chuck; and

(c) separately controlling the RF power delivered to each of the electrode zones so as to produce a desired spatial distribution of RF power ~~in the area of the semiconductor device~~ in response to determining a density of said plasma across said process wafer face, said desired spatial distribution of RF power selected to achieve a uniform density of said plasma across said entire surface of said process wafer.

2. (original) The method of claim 1, wherein step (c) is performed by tuning each of a plurality of electrical circuits respectively associated with the zones.

3. (original) The method of claim 2, wherein step (b) includes capacitively coupling the power generated in step (a) to each of the zones.

4. (original) The method of claim 3, wherein step (c) includes tuning each of the capacitors used to couple the power to the zones.

5. (canceled)

6. (original) The method of Claim 1, wherein step (a) is performed using a single source of RF power.

7. (currently amended) The method of claim 1, ~~including~~ wherein determining said plasma density comprises sensing the spatial distribution of RF power in a chamber used to process the semiconductor device~~, and wherein the RF power delivered in step (b) is controlled based on the sensed distribution~~.

8. (canceled)

9. (currently amended) The method of claim 1, ~~including arranging a plurality of electrodes on an chuck used to hold the semiconductor device, and capacitively coupling the electrodes to an RF power source~~ wherein said separate electrode zones comprises a plurality of concentric ring electrodes insulated from one another.

Claims 10-19 (canceled)

20. (currently amended) The method of claim 1, wherein said ~~step (a) is carried out by an~~ RF power generator comprises a dual frequency system.

21. (previously presented) The method of claim 3, wherein said step of capacitively coupling the electrode portions with the RF generator is carried out by a capacitor network.

22. (currently amended) The method of claim [[21]] 1 ~~further~~ wherein said matching network ~~comprising the step of~~ electrically matches~~ing~~ the RF generator with the capacitor network.

23. (previously presented) The method of claim 21 further comprising the step of capacitively coupling the electrode portions with the RF generator by a plurality of variable capacitors.

24. (previously presented) The method of claim 23 further comprising the step of tuning each of the capacitors by a controller in the connecting circuit.

25. (currently amended) The method of claim 23 further comprising the step of providing said electrode zones in concentric ring electrodes.

26. (previously presented) The method of claim 25 further comprising the step of coupling the respective variable capacitors with the ring electrodes to capacitively couple RF power from the generator to the ring electrodes.

27. (previously presented) The method of claim 25 further comprising the step of tuning the variable capacitors and controlling the amount of power coupled to each of the ring electrodes.

28. (currently amended) The method of claim 1 [[24]] wherein step (c) comprises ~~further comprising the step of~~ sensing information related to the spatial distribution of the plasma density and delivering the sensed information to ~~the~~ a controller, said controller controlling said desired spatial distribution of said RF power ~~by a sensor~~.

29. cancelled

31. (new) The method of claim 1, wherein said desired spatial distribution of RF power is maintained substantially constant as a function of time during a plasma process.

32. (new) The method of claim 1, wherein said plasma density is maintained substantially uniform over said process wafer face as a function of time during a plasma process.

33. (new) A method of controlling the spatial distribution of RF power used to generate a plasma for processing a semiconductor device process wafer to achieve a uniform density of said plasma over an entire face of said process wafer, comprising the steps of:

producing RF power from a single RF power generator;

delivering the RF power to each of a plurality of separate electrode zones according to a matching network, said RF power individually deliverable to separate electrode zones at a selected RF power level, said separate electrode zones comprising an electrostatic chuck; and

separately controlling the RF power delivered to each of the electrode zones so as to produce a desired spatial distribution of RF power in response to determining a density of said plasma across said process wafer face, said desired spatial distribution of RF power selected to achieve a uniform density of said plasma across said entire face of said process wafer as a function of time during a plasma process.